

## IV. PARK AND RECREATION DEMAND AND TRENDS

### ANNUAL VISITATION TRENDS

Carolina Beach State Park's annual visitation for the years from 1994 through 2006 is shown below in Figure IV-1. One traffic counter, located just inside the park entrance, is used to record visitation. A persons-per-car multiplier of two was used up until 2006, when the multiplier was changed to four to more accurately reflect visitation based upon visitor surveys. Visitation for the years prior to 2006 has been retroactively adjusted for the purposes of this document.

In the years from 1994 through 2006, visitation has averaged 447,562 annually and ranged from a low of 352,680 in 1999 to a high of 516,114 in 2001. In 1999 hurricanes Dennis, Floyd and Irene impacted the area, causing the park to be closed for 14 days and thus decreasing park attendance. Traffic counter problems in 1999 also contributed to lower recorded visitation. Bad weather and major storms, particularly during popular holidays and summer weekends, can significantly impact visitation at state park units.

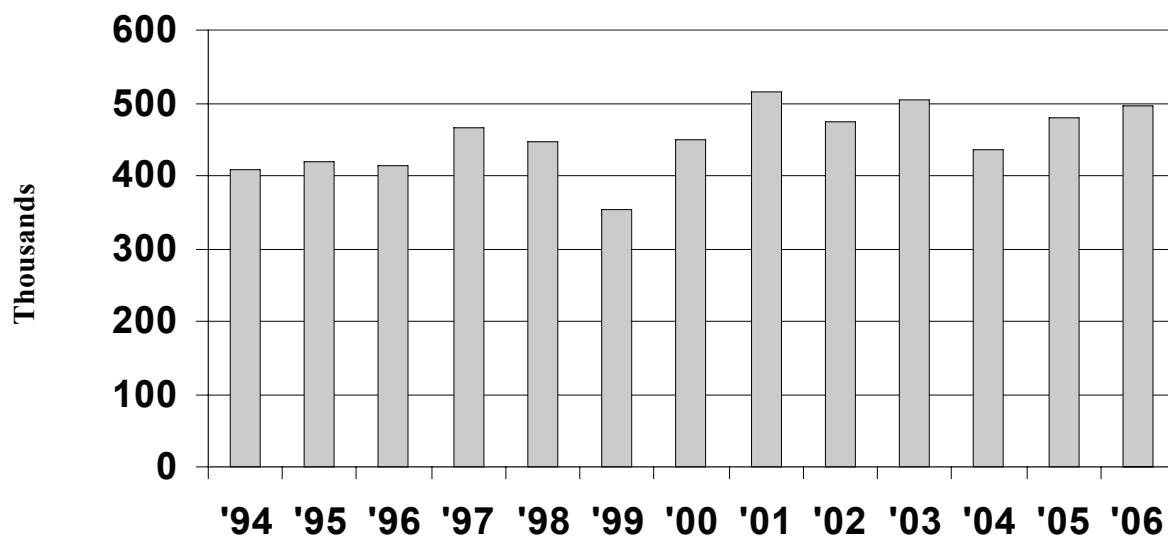
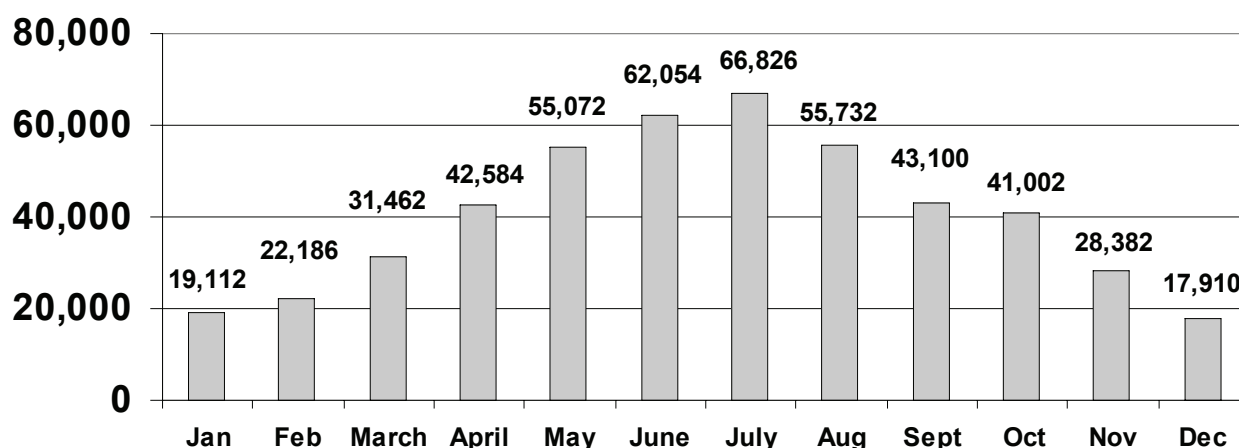


Figure IV-1. Carolina Beach State Park Annual Visitation: 1994 - 2006

### MONTHLY VISITATION TRENDS

Figure IV-2 shows the average monthly visitation at Carolina Beach State Park for the four years ending in 2003 (adjusted for the increase in the persons-per-car multiplier to four). Carolina Beach State Park's monthly visitation increases in the spring as the weather warms, peaking in July at 66,826 visits. Average monthly visitation then decreases each month through the end of the year, with attendance dropping to a monthly low of 17,910 in December.

The monthly visitation pattern suggests using seasonal and peak load personnel to assist in months of higher visitation. Where possible, staff vacation and other leave should be scheduled at times other than the higher visitation months.



**Figure IV-2. Carolina Beach State Park Average Monthly Visitation (2000-2003)**

## VISITOR INFORMATION

In 1987 the United States Forest Service was contracted to conduct a Public Area Recreation Visitors Survey (PARVS) for the North Carolina State Parks System. The survey was designed to identify visitor socio-economic characteristics and economic contributions to the state's economy. Since Carolina Beach State Park was one of the eight park units involved in the survey, the general information concerning state park visitors is particularly useful in assessing visitation trends at the park.

Why do people visit state park units? The convenient location was cited by 31 percent of the respondents; 25 percent thought other areas were too crowded; 21 percent liked the quality facilities; 8 percent wanted to try a new area; 7 percent enjoyed the scenic beauty; and 6 percent came to see the attraction.

More than one third of state park visitors come from within a 30-mile radius (37 percent), while 17 percent come from 30 to 60 miles away. Survey respondents indicated that the parks were their sole destination 86 percent of the time. While many visitors come from nearby, the average one-way distance traveled was 139 miles. Approximately 25 percent of state park visitors come from out of state. Visitors averaged 4.1 trips per year to North Carolina state parks.

Seventy-eight percent of those surveyed indicated that they were return visitors. The average number of return trips per year was six. Sixty-one percent of visitors statewide came with family members, 16 percent with friends, and 7 percent with both family and friends. Ten percent of visitors came alone.

Visitors also came in small numbers in organized groups and multiple families.

PARVS data indicates that 16.8 percent of groups surveyed used more than one car, and that the average number of persons per car was 3.0. The average age of the park visitor was 38.2 years. The age distribution was as follows:

**Table IV-1. Percent of Visitors by Age Group**

<u>Under 6</u>	6-12	13-18	19-25	26-35	36-45	46-55	56-65	Over 65
6.7	11.6	10.6	12.5	20.1	16.9	0.9	7.3	4.4

Since over 18 percent of visitors are under the age of 13, a demand exists for children's programs and facilities. Approximately 12 percent of visitors are 56 and older. This older segment of the general population will be increasing, and as it does, demand for improved quality, accessibility, and safety should increase.

### **OUTDOOR RECREATION PARTICIPATION IN NORTH CAROLINA**

The five most popular outdoor recreation activities in North Carolina are walking for pleasure, driving for pleasure, viewing scenery, participating in beach activities, and visiting historical sites. Three out of every four households participated in walking for pleasure at least once in the past 12 months (Table IV-2). In addition to the five most popular activities, over fifty percent of the households responding to a 1989 survey participated at least once in the following activities: swimming (in lakes, rivers, or oceans), visiting natural areas, picnicking, attending sports events, visiting zoos, and freshwater fishing.

The North Carolina Outdoor Recreation Participation Survey was mailed to 3,100 randomly selected residents in the spring of 1989. Forty-five percent, or 1,399 people, returned completed surveys. Each person receiving the survey was asked to estimate the number of times that household members had participated in each of 43 activities. The survey results provide good insight into the current participation of North Carolinians in a wide range of outdoor recreation activities. The survey results also closely mirror those of the National Survey on Recreation and the Environment conducted in 1994-1995 and 2000.

**Table IV-2. Outdoor Recreation Activities Ranked by Popularity.**

RANK	ACTIVITY	PERCENTAGE OF HOUSEHOLDS PARTICIPATING
1.	Walking for Pleasure	75%
2.	Driving for Pleasure	72
3.	Viewing Scenery	71
4.	Beach Activities	69
5.	Visiting Historical Sites	62
6.	Swimming (in Lakes, Rivers, and Oceans)	54
7.	Visiting Natural Areas	53
8.	Picnicking	52
9.	Attending Sports Events	52
10.	Visiting Zoos	51
11.	Fishing - Freshwater	50
12.	Use of Open Areas	41
13.	Swimming (in Pools)	40
14.	Fishing - Saltwater	38
15.	Attending Outdoor Cultural Events	35
16.	Bicycling for Pleasure	32
17.	Other Winter Sports	31
18.	Camping, Tent or Vehicle	29
19.	Softball and Baseball	28
20.	Hunting	28
21.	Use of Play Equipment	28
22.	Power Boating	26
23.	Trail Hiking	26
24.	Jogging or Running	24
25.	Basketball	24
26.	Nature Study	22
27.	Golf	22
28.	Target Shooting	20
29.	Water Skiing	19
30.	Camping, Primitive	14
31.	Tennis	14
32.	Use Motorcycles, Dirt Bikes, ATVs	13
33.	Use Four Wheel Drive Vehicles	13
34.	Canoeing and Kayaking	13
35.	Horseback Riding	12
36.	Volleyball	12
37.	Downhill Skiing	12
38.	Football	11
39.	Soccer	7
40.	Sailboating	7
41.	Skateboarding	6
42.	Cross Country Skiing	2
43.	Windsurfing	1

## PRIORITIES OF PUBLIC OUTDOOR RECREATION FUNDING

The North Carolina Outdoor Recreation Survey asked residents a series of questions in order to identify and rank future demand for various types of public outdoor recreation activities. Future demand was determined by asking them which activities they would have tried more often had adequate facilities been available. Respondents were then asked to rank these activities in order of importance. A scoring system was used assigning each activity a rating of high, moderate or low future demand based on the survey results.

In the second part of the analysis, the respondents' level of support for publicly funded outdoor recreation activities was determined by asking them to identify and rank those activities to which government should give highest priority when spending public money. The same scoring system used to analyze unmet demand was then applied to the survey results, with each activity receiving a high, moderate or low rating in public support for public funding.

In the final part of the needs analysis, the two ratings for each activity were combined to produce a score from one to nine that reflected both future demand and public funding priorities. The activities that ranked high in both future demand and support for public funding received the highest priority in the needs assessment. Support for public funding was given higher priority than expressed demand (Table IV-3).

**Table IV-3. Priorities for Future Outdoor Recreation Activities**

ACTIVITY	CODE	FUTURE DEMAND	SUPPORT FOR PUBLIC FUNDING
Walking for Pleasure	1	High	High
Camping, Tent or Vehicle	1	High	High
Picnicking	1	High	High
Beach Activities	1	High	High
Fishing - Freshwater	1	High	High
Attend Outdoor Cultural Events	1	High	High
Visiting Natural Areas	2	Moderate	High
Use of Play Equipment	2	Moderate	High
Visiting Zoos	2	Moderate	High
Visiting Historical Sites	2	Moderate	High
Bicycling for Pleasure	3	High	Moderate
Swimming (in Pools)	3	High	Moderate
Viewing Scenery	4	Moderate	Moderate
Hunting	4	Moderate	Moderate
Trail Hiking	4	Moderate	Moderate
Use of Open Areas	4	Moderate	Moderate
Target Shooting	4	Moderate	Moderate
Swimming (Lakes, Rivers, Ocean)	4	Moderate	Moderate
Fishing - Saltwater	4	Moderate	Moderate

## **NEARBY STATE AREAS AND FACILITIES**

### **Bald Head Island State Natural Area**

The Bald Head Island State Natural Area consists of a complex of barrier islands, salt marshes, bays, tidal creeks and estuarine islands located south of the state recreation area. (Figure IV-3) The state natural area, a unit of the N.C. State Parks System, is under administration of staff from Fort Fisher State Recreation Area and includes: all of Bluff Island; about five miles of the beach strand of East Beach and the marshes behind it; and land at the actual point of Cape Fear on the southeastern tip of Bald Head Island. The state natural area contains sand ridges with Dune Grass communities, Maritime Wet Grassland in the swales, Maritime Evergreen Forest, Interdune Pond community, Salt Marsh and Maritime Shrub communities.

Bald Head Island State Natural Area is part of a nationally significant biological complex. East Beach provides excellent nesting habitats for loggerhead and green sea turtles (threatened – federal) and least terns (special concern – state) because it is one of the few beaches in southern North Carolina that is free of both vehicular traffic and lights associated with adjacent beach development. Seabeach amaranth plants (threatened – federal) are succulent annuals that grow in foredune areas and inter-dune flats. Notable plants (i.e., significantly rare – state) found in back dune, shrub thicket and maritime forest communities of Bluff Island include tough bumelia, dune bluecurls, cabbage palmetto, moundlily yucca, four-angled sedge and sunrise lichen. At the south end of the property, Cape Fear contains additional listed species in the dynamic beach/dune complex located at the southeastern-most point of the state: loggerhead sea turtle (threatened – federal), Wilson’s plover (significantly rare – state), peregrine falcon (endangered – federal), common ground dove (significantly rare – state), coachwhip (significantly rare – state), seabeach amaranth (threatened – federal), seabeach knotweed (significantly rare – state) and beach morning-glory (significantly rare – state) (NCNHP, 2004).

### **Bald Head Woods Coastal Reserve**

The 186-acre [Bald Head Woods](#), managed by the N.C. Division of Coastal Management with the Bald Head Island Conservancy as its local steward, is located in the central portion of Bald Head Island (Figure IV-3). The N.C. Natural Heritage Program lists Bald Head Island as a priority site of national significance, and the U.S. Department of the Interior has registered the Smith Island Complex as a National Natural Landmark. One of the significant features of Bald Head Woods is the extremely old, large trees in this maritime forest. Live oak and laurel oak are the major species, making up a canopy that shelters the plants from salt spray. The thick undergrowth consists of wild olive, American holly, yaupon, and catbrier. The lack of light favors shade-tolerant plants like ebony spleenwort. Cabbage palmetto appears throughout the forest. Local wetlands provide habitat and breeding grounds for amphibians and reptiles such as the southern toad, squirrel tree frog, eastern mud turtle, and black racer. Gray squirrels, raccoons and opossums inhabit the forest, as do Carolina wrens, cardinals and painted buntings. Catbirds, towhees, blue jays and twenty-two species of warblers migrate through in the fall. Trails and interpretive signs wind through the reserve.



**Figure IV-3. Lower Cape Fear Peninsula**



## **WRC Boating Accesses**

In addition to the boat ramps at the Carolina Beach State Park marina, other public boating accesses are nearby. Outside of Carolina Beach State Park, on the southeast side of the Snow's Cut bridge, the N.C. Wildlife Resources Commission (WRC) operates a public boating access that provides access to the Intracoastal Waterway (Figure IV-3). The WRC also operates a boating access at The Basin at Federal Point, located approximately five miles south of Carolina Beach. On the north side of Snow's Cut across from Carolina Beach State Park, a public park is operated by New Hanover County that offers fishing and picnicking facilities.

## **Fort Fisher State Historic Site**

The [Fort Fisher State Historic Site](#), located four miles south of Carolina Beach, includes a visitor center, museum and historic trail that offer a look into the history of the Civil War era fort and lower Cape Fear Region (Figure IV-3). Adjacent to the historic site is an exhibit building operated by the Underwater Archaeology Section of the N.C. Department of Cultural Resources that features artifacts and maritime history.

## **Fort Fisher State Recreation Area**

[Fort Fisher State Recreation Area](#) is located five miles south of Carolina Beach (Figure IV-3). Its 287 acres lie along the ocean beach and include over seven miles of undeveloped shoreline and a great diversity of maritime habitats, including sandbars and intertidal pools, maritime forest, and salt marsh. Bird life abounds along the beach, salt marsh, tidal creeks and mudflats, and the threatened loggerhead turtle uses the beach as nesting habitat. A small visitors center includes nature exhibits, restrooms, and a refreshment stand that is open during the summer months. A marsh trail offers a glimpse into sound-side wildlife and habitats.

## **N.C. Aquarium at Fort Fisher**

The [N.C. Aquarium at Fort Fisher](#) is located on Loggerhead Road south of the state recreation area visitor center and parking (Figure IV-3). The newly remodeled and expanded aquarium offers indoor and outdoor exhibits, an auditorium and classrooms. Daily programs feature live animals, marine life videos and special activities. Programs are conducted both within the aquarium and outside.

## **Southport-Fort Fisher Ferry**

The N.C. Department of Transportation toll ferry transports vehicles and passengers across the Cape Fear River between Fort Fisher and Southport. Crossing time is about 30 minutes. Each ferry holds 30 cars, and waiting lines often form during summer months. (Figure IV-3)

## **N.C. National Estuarine Research Reserve - Zeke's Island**

The [N.C. National Estuarine Research Reserve - Zeke's Island](#), a component of the North Carolina National Estuarine Research Reserve, an 1160-acre area of outstanding estuarine and ocean resources with extensive marshes and tidal flats, is found to the west of the state recreation area. The reserve includes a portion of the long rock jetty called "The Rocks" and The Basin as well as Zeke's Island,



No-Name, and North Island. The Division of Coastal Management manages the area for research, education and compatible recreation (Figure IV-3).

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